

Claims

- [c1] 1. A bicycle derailleur adapted to mount to a threaded shaft that fixes the derailleur to a bicycle frame, wherein the derailleur comprises:
- a base member including an engagement member for nonrotatably engaging the bicycle frame;
 - a threaded member coupled to the base member for engaging the threaded shaft;
 - a chain guide; and
 - a coupling mechanism coupled between the base member and the chain guide so that the chain guide moves relative to the base member.
- [c2] 2. The derailleur according to claim 1 wherein the threaded member comprises a female threaded member.
- [c3] 3. The derailleur according to claim 2 wherein the bicycle frame is adapted to support a wheel hub having a threaded hub axle, and wherein the female threaded member is dimensioned to engage the hub axle.
- [c4] 4. The derailleur according to claim 1 wherein the engagement member comprises a projection that engages the bicycle frame.

[c5] 5. The derailleur according to claim 4 wherein the bicycle frame includes a slot adapted to support a hub axle of a wheel hub therethrough, and wherein the projection is structured to engage the slot.

[c6] 6. The derailleur according to claim 1 wherein the coupling mechanism comprises:
a movable member that pivotably supports the chain guide; and
a link mechanism adapted to be connected to a shift cable assembly so that the link mechanism moves in response to movement of the shift cable.

[c7] 7. The derailleur according to claim 6 wherein the shift cable assembly comprises an inner wire that slides within an outer casing, and wherein the link mechanism comprises:
a first link member having a first end and a second end;
a second link member having a first end and a second end;
wherein the first end of the first link member is pivotably coupled to the base member;
wherein the second end of the first link member is pivotably coupled to the movable member;
wherein the first end of the second link member is pivotably coupled to the base member;

wherein the second end of the second link member is pivotably coupled to the movable member;
an inner wire mounting unit disposed one of the first and second link members for mounting the inner wire of the shift cable assembly; and
a biasing member that biases the movable member relative to the base member.

[c8] 8. The derailleur according to claim 1 wherein the base member comprises:
a first base member body adapted to be mounted to the frame;
a second base member body rotatably supported by the first base member body; and
wherein the second base member body is supported at first and second lateral locations, and wherein the first base member body supports at least one of the first and second lateral locations of the second base member body.

[c9] 9. The derailleur according to claim 8 wherein the first base member body supports the first and second lateral locations of the second base member body.

[c10] 10. The derailleur according to claim 9 further comprising a rotation restricting mechanism that restricts rotation of the second base member body relative to the first

base member body.

[c11] 11. The derailleur according to claim 10 wherein the rotation restricting mechanism comprises:
a first rotation restricting component; and
a second rotation restricting component;
wherein the first rotation restricting component engages the second rotation restricting component to restrict counterclockwise rotation of the second base member body relative to the first base member body.

[c12] 12. The derailleur according to claim 11 further comprising a biasing unit that biases the second base member body clockwise relative to the first base member body.

[c13] 13. The derailleur according to claim 1 wherein the threaded member comprises a female threaded nut member.

[c14] 14. The derailleur according to claim 13 wherein the base member includes a nut mounting member, and further comprising a rotation restricting mechanism that restricts rotation of the nut member relative to the nut mounting member.

[c15] 15. The derailleur according to claim 14 wherein the rotation restricting mechanism comprises a projection dis-

posed on one of the nut member and the nut mounting member and a concavity disposed on the other one of the nut member and the nut mounting member, wherein the projection engages the concavity.

[c16] 16. The derailleur according to claim 14 wherein the rotation restricting mechanism comprises:
a first pair of abutments that restrict rotation of the nut member relative to the nut mounting member in one of a clockwise direction and a counterclockwise direction;
and
a second pair of abutments that restrict rotation of the nut member relative to the nut mounting member in the other one of the clockwise direction and the counterclockwise direction.

[c17] 17. The derailleur according to claim 16 wherein the rotation restricting mechanism comprises a projection disposed on one of the nut member and the nut mounting member and a concavity disposed on the other one of the nut member and the nut mounting member, wherein the projection engages the concavity.

[c18] 18. The derailleur according to claim 17 wherein the first pair of abutments and the second pair of abutments are formed by the projection and the concavity.

[c19] 19. The derailleur according to claim 18 wherein the first pair of abutments are formed in part by a first circumferential face of the projection, and wherein the second pair of abutments are formed in part by a second circumferential face of the projection opposite the first circumferential face of the projection.

[c20] 20. The derailleur according to claim 19 wherein the nut member is at least partially disposed in the nut mounting member.